Inventors: Margoscin et al. Appl. Ser. No.: 09/459,260 Atty. Dckt. No.: 5053-30700

Amendments to the Claims

Please cancel claim 59 without prejudice.

The following listing of claims will replace all prior versions and/or listings of claims in the application.

Listing of Claims:

1-35. (cancelled)

36. (currently amended): A system comprising:

a server configured to process business transactions;

a middleware program communicatively coupled to the server, wherein the middleware program comprises a domain file;

a domain file accessible by the middleware program, wherein the domain file comprises a list of allowable values associated with one or more business transactions;

a channel communicatively coupled to the middleware program and to the server; and an interface program communicatively coupled to the channel and to the middleware program, wherein the interface program is configured to receive data from the channel and to receive a command that will initiate a business transaction and transmit the command to the middleware program;

wherein the interface program receives the data from the channel and transmits the data to the middleware program; wherein the middleware program determines whether portions of the received data include allowable values based on the domain file, and wherein the middleware program transforms the data into a form required by the server and transmits the transformed data to the server, wherein the server performs the business transaction after the command to initiate

2

Atty. Dckt. No.: 5053-30700

the business transaction has been transmitted to the middleware program and the transformed data is transmitted to the server.

37. (previously presented): The system of claim 36, wherein the middleware program receives a result from the business transaction server and transfers the result to the interface program.

- 38. (previously presented): The system of claim 36, wherein the channel comprises a kiosk.
- 39. (previously presented): The system of claim 36, wherein the channel comprises a computer terminal.
- 40. (previously presented): The system of claim 36, wherein the channel comprises a telephone call center.
- 41. (previously presented): The system of claim 36, wherein the channel comprises an electronic data transfer system.
- 42. (previously presented): The system of claim 36, wherein a local area network communicatively couples the channel to the server.
- 43. (previously presented): The system of claim 36, wherein a wide area network communicatively couples the channel to the server.
- 44. (previously presented): The system of claim 36, wherein portions of the domain file may be changed without changing code of the middleware program.

Attv. Dckt. No.: 5053-30700

45. (previously presented): The system of claim 36, wherein the middleware program generates an error code if the portions of the received data include values that are not allowable values.

- 46. (previously presented): The system of claim 45, further comprising a domain manager, and wherein the domain file comprises at least one serialized file generated by the domain manager.
- 47. (previously presented): The system of claim 36, wherein the middleware program transfers data to a plurality of business transaction servers during the processing of a business transaction.
- 48. (previously presented): The system of claim 36, wherein the middleware program comprises computer code written in an object-oriented programming language.
- 49. (previously presented): The system of claim 36, wherein the middleware program is extendable without altering source code of the middleware program.
- 50. (previously presented): The system of claim 49, wherein an extension to the middleware program comprises computer code that is stored in a package and run when the middleware program runs.
- 51. (currently amended): A carrier medium that stores program instructions, wherein the carrier medium comprises at least one file that stores a list of allowable values, wherein the program instructions are computer-executable to implement a method comprising:

receiving data from one interface program of a plurality of interface programs, wherein each interface program is communicatively coupled to one of a plurality of channels, wherein the data is received by the interface program from the channel to which it is coupled;

Atty. Dckt. No.: 5053-30700

determining whether a portion of received data includes values in a-the list of allowable values;

after determining that the portion of received data includes values in a list of allowable values, flattening the data; and

transferring the flattened data to a business transaction server;

wherein the program instructions comprise a plurality of objects, wherein at least one of the plurality of objects is used in determining whether the portion of received data includes values in a list of allowable values.

- (previously presented): The carrier medium of claim 51, wherein the channel comprises a 52. kiosk.
- 53. (previously presented): The carrier medium of claim 51, wherein the channel comprises a computer terminal.
- 54. (previously presented): The carrier medium of claim 51, wherein the channel comprises a telephone call center.
- 55. (previously presented): The carrier medium of claim 51, wherein the channel comprises an electronic data transfer system.
- 56. (previously presented): The carrier medium of claim 51, wherein a local area network communicatively couples the channel to the server.
- 57. (previously presented): The carrier medium of claim 51, wherein a wide area network communicatively couples the channel to the server.

Atty. Dckt. No.: 5053-30700

58. (previously presented): The carrier medium of claim 51, further comprising a separate set of computer instructions that extend the functionality of the set of computer instructions.

- 59. (cancelled).
- 60. (previously presented): The carrier medium of claim 51, wherein the program instructions are further computer-executable to implement:

receiving a result from the business transaction server; inflating the result; and transferring the result to the interface program.

61. (currently amended): A method of performing a business transaction on a computer system using a user interface program, a middleware program comprising a domain file, and a business transaction server, the method comprising:

entering data into a channel that communicatively couples to the user interface; transferring the data to the middleware program;

determining whether a portion of the data includes values in a list of allowable values in the domain file, wherein if the portion of the data does not include values in a list of allowable values, notifying the user interface, and receiving corrected data;

after determining that the data includes values in a list of allowable values, transforming the data into a form required by the business transaction server using the middleware program;

transferring the transformed data to the business transaction server using the middleware program; and

processing the transformed data using the business transaction server.

Atty. Dckt. No.: 5053-30700

62. (previously presented): The method of claim 61, further comprising transferring results from the business transaction server to the middleware program, and transferring results from the

middleware program to the user interface.

63. (previously presented): The method of claim 62, wherein the middleware program

transforms the results into a form recognizable to the user interface program before transmitting

the results to the user interface.

64. (previously presented): The method of claim 61, further comprising generating an error

code if an entered data value is not included in the list of allowable values.

65. (previously presented): The method of claim 64, wherein the list of allowable values is

located in serialized files during use.

66. (previously presented): The method of claim 65, wherein the serialized domain files are

generated from domain files by a domain manager.

67. (previously presented): The method of claim 61, wherein the middleware program

determines if all required data to process the business transaction is present before transferring

the data to the business transaction server, and wherein the middleware program generates an

error code if all the required data is not present before the data is transferred to the business

transaction server.

68. (previously presented): The method of claim 61, wherein the middleware program orders

the data into an order required by the business transaction server before transferring the data to

the business transaction server.

7

Atty. Dckt. No.: 5053-30700

69. (previously presented): The method of claim 61, wherein the middleware program transfers data to and receives results from a plurality of business transaction servers during processing of the business transaction.

- 70. (previously presented): The method of claim 61, wherein the business transaction server comprises a legacy program.
- 71. (currently amended): The method of claim 3661, further comprising determining if the received data comprises data required to perform the initiated business transaction.
- 72. (currently amended): The method of claim 3661, further comprising placing the received data in order prior to transferring the data to the server.
- (currently amended): The method of claim 5161, further comprising determining if the 73. received data comprises data required to perform a business transaction.
- 74. (currently amended): The method of claim 5161, further comprising placing the received data in order prior to transferring the data to the server.
- 75. (previously presented): The method of claim 61, further comprising placing the data in order prior to transferring the data to the server.